

## INTERNATIONAL SEARCH REPORT

International Application No
PCT/Gb 03/05520

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E21B33/138 E21B17/10 E21B21/00
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According to International Patent Classification (IPC) or to both national classification and IPC
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B. FIELDS SEARCHED
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Minimum documentation searched (classification system followed by classification symbols) IPC 7 E21B
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
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EPO-Internal
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C. DOCUMENTS CONSIDERED TO BE RELEVANT
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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 776 111 A (JAMES VANCE) 1 January 1957 (1957-01-01) column 4, lines 6-7; figures 3,4,6	1-7, 17-21
A	-----	8-16,22
A	SU 1 361 304 A (KB POLT INST KUJBYSHEVA) 23 December 1987 (1987-12-23) cited in the application the whole document	1-22
A	US 4 049 066 A (RICHEY VERNON T) 20 September 1977 (1977-09-20) the whole document	1-22
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search	Date of mailing of the International search report
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31 March 2004	07/04/2004
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Name and mailing address of the ISA	Authorized officer
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

Internat Application No  
PCT/GB 03/05520

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 2776111	A 01-01-1957	NONE		
SU 1361304	A 23-12-1987	SU 1361304 A1		23-12-1987
US 4049066	A 20-09-1977	NONE		